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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/540,045	06/22/2005	Frans Eduard Janssens	JAB1733f	8682
	7590 01/10/200 WASHBURN LLP	8	EXAMINER	
CIRA CENTRE	E, 12TH FLOOR		BERNHARDT, EMILY B	
2929 ARCH STREET PHILADELPHIA, PA 19104-2891			ART UNIT	PAPER NUMBER
			1624	
			NOTIFICATION DATE	DELIVERY MODE
			01/10/2008	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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	Application No.	Applicant(s)			
Office Action Occurrence	10/540,045	JANSSENS ET AL.			
Office Action Summary	Examiner	Art Unit			
	Emily Bernhardt	1624			
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address			
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).					
Status					
1) Responsive to communication(s) filed on					
	-· action is non-final.				
<i>,</i> —	-				
closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
·		0 0.0.2.0.			
Disposition of Claims					
 4) Claim(s) 1-17 is/are pending in the application. 4a) Of the above claim(s) 16 and 17 is/are withdrawn from consideration. 5) Claim(s) is/are allowed. 6) Claim(s) 1-15 is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/or election requirement. 					
Application Papers					
9) The specification is objected to by the Examiner. 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.					
Priority under 35 U.S.C. § 119					
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 					
Attachment(s) Notice of References Cited (PTO-892)					

In accord with 35 USC 121 and 372, applicants are advised that where more than one process of making is claimed along with compounds, the first recited process is considered to form part of the main invention.

See 37 CFR 1.475(d). Thus only the first process in claim 15 along with remaining claims is being examined. Claims 16 and 17 are withdrawn.

The examiner has required restriction between product and process claims. Where applicant elects claims directed to the product, and the product claims are subsequently found allowable, withdrawn process claims that depend from or otherwise require all the limitations of the allowable product claim will be considered for rejoinder. All claims directed to a nonelected process invention must require all the limitations of an allowable product claim for that process invention to be rejoined.

In the event of rejoinder, the requirement for restriction between the product claims and the rejoined process claims will be withdrawn, and the rejoined process claims will be fully examined for patentability in accordance with 37 CFR 1.104. Thus, to be allowable, the rejoined claims must meet all criteria for patentability including the requirements of 35 U.S.C. 101, 102, 103 and 112. Until all claims to the elected product are found allowable, an otherwise proper restriction requirement between

product claims and process claims may be maintained. Withdrawn process claims that are not commensurate in scope with an allowable product claim will not be rejoined. See MPEP § 821.04(b). Additionally, in order to retain the right to rejoinder in accordance with the above policy, applicant is advised that the process claims should be amended during prosecution to require the limitations of the product claims. **Failure to do so may result in a loss of the right to rejoinder**. Further, note that the prohibition against double patenting rejections of 35 U.S.C. 121 does not apply where the restriction requirement is withdrawn by the examiner before the patent issues. See MPEP § 804.01.

Claims 9-12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

1. Claim 9 is incomplete as recited since it does particularly point out the invention by reciting intended subject matter so that one reading the claims can ascertain its scope but rather resorts to the specification which is improper. Note reliance on the specification to define claimed subject

matter is permitted only under certain circumstances as discussed in Ex parte Fressola 27 USPQ 2d 1608.

- 2. Claim 10 is not further limiting the scope of claim 1 as intended use(s) in such claims are given no material weight. Note In re Tuominen 213 USPQ 89.
 - 3.Claims 11 and 12 provide for treating various uses, but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

Appropriate correction is required.

Claim 12 is rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd.* v. *Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

The incorporation of essential material in the specification by reference to an unpublished U.S. application, foreign application or patent, or to a publication is improper. Applicant is required to amend the

disclosure to include the material incorporated by reference, if the material is relied upon to overcome any objection, rejection, or other requirement imposed by the Office. The amendment must be accompanied by a statement executed by the applicant, or a practitioner representing the applicant, stating that the material being inserted is the material previously incorporated by reference and that the amendment contains no new matter. 37 CFR 1.57(f).

The attempt to incorporate subject matter into this application by reference to WO publications is ineffective because said publications are being relied on for essential material- i.e. in the preparation of early starting material sources. See page 28.

Claims 1-15 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. As the specification improperly incorporates essential material the preparation of instant compound is not enabling.

Claims 1, 3-8 and 10-15 are also rejected under 35 U.S.C. 112, first

paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Specification is not enabled for scope of compounds being claimed which includes an assortment of Het rings at R2 coupled with varying ring sizes of both azine rings. Compounds made and tested represent the scope of claims 2 and 9 which always have as R2 an aryl ring with piperidino-piperazino link. There is no reasonable basis for assuming that the myriad of compounds embraced by the all the generic claims will all share the same physiological properties since they are so structurally dissimilar as to be chemically non-equivalent and there is no basis in the prior art for assuming the same. Note In re Surrey 151 USPQ 724 regarding sufficiency of disclosure for a Markush group. Also see MPEP 2164.03 for enablement requirements in cases directed to structuresensitive arts such as the pharmaceutical art.

Also note the criteria for enablement as set out in In re Wands cited in MPEP 2164.01(a), August 2000 edition, which includes factors such as:

Application/Control Number: 10/540,045

Art Unit: 1624

1) Breadth of the claims- the claims cover compounds easily in the millions as pointed out above;

Page 7

- 2) Level of unpredictability in the art- the invention is pharmaceutical in nature as it involves binding to one or more NK receptors. It is well established that "the scope of enablement varies inversely with the degree of unpredictability of the factors involved" and physiological activity is generally considered to be unpredictable. See In re Fisher 166 USPQ 18:
- 3) Direction or guidance- as stated above the compounds made are not representative of the instant scope but are closer to each other than to remaining scope being always phenyl at R2 with varying L choices.

 Evidence of structure sensitivity is seen for the limited data presented;
 - 4) State of the prior art- The compounds are acylated N-piperidiinopiperazinyl derivatives with a second piperidine directly attached to the
 other piperazine terminus. While similar compounds are known as
 evident from the art of record cited below they are otherwise similar
 substituted to the compounds made herein and thus do not evidence the
 many structural permutations permitted in the instant scope are known
 for at least one use in the prior art;

Application/Control Number: 10/540,045 Page 8

Art Unit: 1624

5) Working examples- While test data has been presented, there is varying activity based on the nature of substitution on the right end piperidine ring while R2 is always the same group (i.e. bis trifluormethylphenyl) and thus no clear evaluation of how varying this position might affect potency to a large or small degree.

In view of the above considerations, this rejection is being applied.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO'428 and earlier priority document, WO'772. Each of the commonly assigned documents have international filing dates that precede applicants' international filing date and the inventive entities are different. The compounds in these WO publications are very similar in structure to that claimed herein and are taught for the same uses. Also compounds are made by the process outlined in claim 15 as this is the starting point for making all of the compounds. See page 23 of WO'428. The compounds differ from that claimed herein solely in point of attachment of the piperidine

Page 9

ring at the right-end side- i.e. 4- vs instant 3- attachment and are this adjacent position isomers. Position isomers are not deemed patentably distinct absent evidence of superior, unexpected results. See In re Crounse 150 USPQ 554; Ex parte Engelhardt 208 USPQ 343 regarding position isomerism. Thus it would have been obvious to one skilled in the art at the time the invention was made to expect instant 3-piperidinyl derivatives to also possess the uses taught by the applied art in view of the close structural similarity outlined above and their preparation an obvious expedient given the teachings of the art.

It is recognized applicants are claiming benefit under 35 USC 119 of a priority document which has the same filing date as the earlier of the 2 WO documents. However, benefit cannot be accorded as the claims at the very least do not comply with 35 USC 112, par.one, i.e. enablement for the reasons given in the above 112 rejections under par.one. See In re Gostelli 10 USPQ 2nd 1614; Kawai v. Metlesics 178 USPQ 158. A copy of the foreign document has not yet been received from the international bureau. The examiner will try to obtain it prior to the next action for review of its contents.

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute)

so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-14 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims of copending Application No. 10/527821. Although the conflicting claims are not identical, they are not patentably distinct from each other because they are directed to compounds, compositions and uses that are obvious variants, i.e. adjacent position isomers, as discussed in the above 103 rejection. The case corresponds to the WO documents applied above.

This is a <u>provisional</u> obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

The U.S. Patent and Trademark Office normally will not institute an interference between applications or a patent and an application of common ownership (see MPEP Chapter 2300).

Commonly assigned 10/527821, discussed above, would form the basis for a rejection of the noted claims under 35 U.S.C. 103(a) if the commonly assigned case qualifies as prior art under 35 U.S.C. 102(e), (f) or (g) and the conflicting inventions were not commonly owned at the time the invention in this application was made. In order for the examiner to resolve this issue, the assignee can, under 35 U.S.C. 103(c) and 37 CFR 1.78(c), either show that the conflicting inventions were commonly owned at the time the invention in this application was made, or name the prior inventor of the conflicting subject matter.

A showing that the inventions were commonly owned at the time the invention in this application was made will preclude a rejection under 35 U.S.C. 103(a) based upon the commonly assigned case as a reference under 35 U.S.C. 102(f) or (g), or 35 U.S.C. 102(e) for applications pending on or after December 10, 2004.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Emily Bernhardt whose telephone number is 571-272-0664.

If attempts to reach the examiner by telephone are unsuccessful, the acting supervisor for AU 1624, James O. Wilson can be reached at 571-272-0661. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Application/Control Number: 10/540,045

Art Unit: 1624

/Emily Bernhardt/ Primary Examiner, Art Unit 1624

Page 13